

Please find the following responses to the Patent application # 10/603,841 entitled "Method for detecting abnormal tissue using enhanced radiopharmaceutical uptake."

Response to Claim Rejections 35 USC § 112

1 + 2. Claims 17, 19, 34 and 36 rejection. Vascular reactivity means the use of dipyridamole to produce vasodilation to deliver a greater amount of isotope to the metabolically active tissue. Prior doses of dipyridamole did not produce adequate dilatation of vessels did not produce significant changes in delivery of isotope to these metabolically active tissues. These metabolically active tissues vary depending upon mitochondrial concentration and their vascularity. The use of the greater dose of dipyridamole produced a "non-obvious" augmentation of blood flow through the vasculature present at the target site.

3. Claims 17 and 34. The vessels of the target tissues are vasodilated by the 0.852 mg dipyridamole/kg body weight, followed by the injection of technetium-99m isotope, which is quantitatively measured by any device capable of detecting radioactive decay emanating from the target tissue.

Claim Rejections 35 USC § 102

Wilson does not demonstrate what our patent demonstrates. Wilson used a lower dose of dipyridamole and thallium-201, which is not taken up by mitochondria. Wilson concluded that the method was "not reliable enough" to be used. Had the patentee been aware of Wilson's work, it would have been cited. However, the use of a higher dose of dipyridamole produced an exponential increase in tracer activity, which could actually be measure, allowing differentiation from any report by Wilson. Furthermore, the high dose dipyridamole (0.852 mg/kg vs. the 0.56 mg/kg dose of Wilson) was a "non-obvious" difference which when compared by the patentee, demonstrated a "non-obvious" exponential increase in the delivery of isotope not seen before. Additionally, Wilson did not "quantify" findings and therefore cannot statistically differentiate between "normal", "inflammatory" or "cancerous" tissue.

Re: claim 13. Atypia means not typical. It may include "inflammatory" but it means not typical. It cannot be relegated to the term "inflammatory" alone and the patentee is the author of the "Inflammation and Heart Disease" theory not Wilson.

Claim Rejection 35 USC § 103

Block Medical Center should be removed from assignee.
Gordon M. Harrington should be included as co-inventor with Richard M. Fleming